

1.0 Purpose, Benefits and Need for the Proposed Actions

[This document constitutes the final state and federal environmental impact statement \(Final EIS\) for the United States portion of the Montana Alberta Tie Ltd. \(MATL\) 230-kV transmission line.](#)

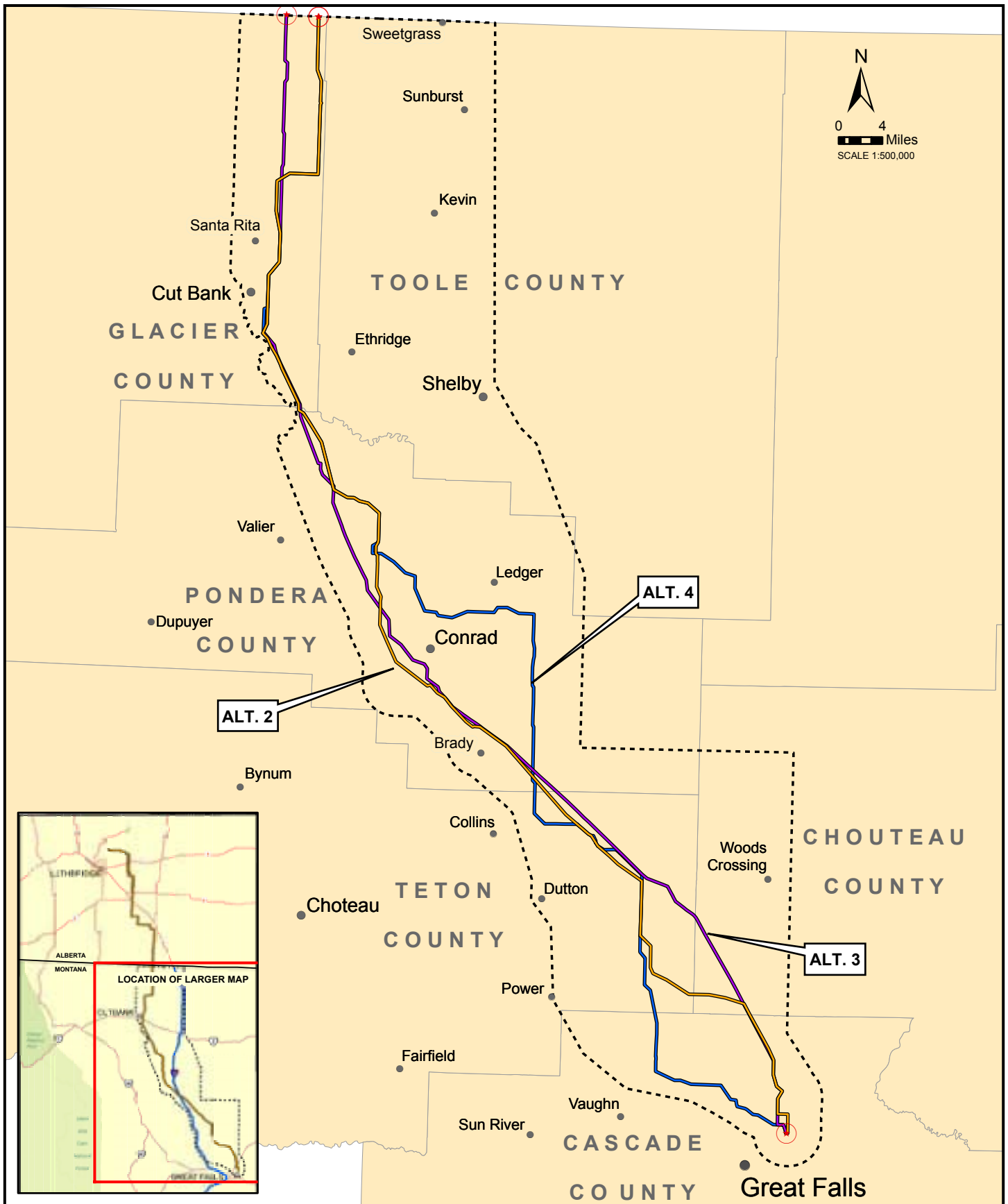
Background

MATL is proposing to construct and operate an international 230-kilovolt (kV) alternating current, merchant (private) transmission line that would originate at an existing NorthWestern Energy (NWE) Great Falls 230-kV Switchyard near Great Falls, Montana, and extend north to a new substation to be constructed northeast of Lethbridge, Alberta, crossing the U.S.-Canada international border north of Cut Bank, Montana. Approximately 130 miles of the 203-mile transmission line is proposed to be constructed in Montana. The line would be owned by MATL, a private Canadian corporation owned by Tonbridge Power. The proposed line would be part of the Western Interconnection (western grid), and a phase shifting transformer would be installed at the substation near Lethbridge to control the direction of power flows on the line.

Before constructing and operating the proposed transmission line, MATL must obtain a Presidential permit from the U.S. Department of Energy (DOE) (10 CFR 205.320 *et seq.*) and a Certificate of Compliance (certificate) from the State of Montana Department of Environmental Quality (DEQ) under the Montana Major Facility Siting Act (MFSA)(75-20-101, *et seq.*, Montana Code Annotated [MCA]). MATL has submitted an application for a certificate to the DEQ and an application to DOE for a Presidential permit. These applications address the portion of the transmission line between Great Falls and the border between the United States and Canada. **Figure 1.1-1** shows the location of the proposed facility and alternatives.

Environmental Review

DEQ approval of the proposed Project must be obtained before construction may begin. In response to the application for a certificate, DEQ must conduct an environmental review. This review is required by the Montana Environmental Policy Act (MEPA)(75-1-101 *et seq.*, MCA) and MFSA. Granting a Presidential permit also requires an environmental review conducted in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 USC §§ 4321-4347). Because of the similarities in the two environmental review processes and the requirements of the regulations implementing NEPA and MEPA, and to reduce the burden and expense of preparing separate documents, DOE and DEQ decided to cooperate as joint lead agencies in the preparation of a single environmental review document that would address both purposes. Initially, DOE considered an environmental assessment (EA) to be the appropriate level of review under NEPA while the DEQ considered the appropriate level of review for MEPA to be an environmental impact statement (EIS) analysis.



**FIGURE 1.1-1
PROJECT STUDY AREA**

- LEGEND**
- ALT2 - ALIGNMENT
 - ALT3 - ALIGNMENT
 - ALT4 - ALIGNMENT
 - CITIES AND TOWNS
 - ALIGNMENT END AND EXIT POINTS
 - STUDY AREA BOUNDARY

NOTE:
ALT = ALTERNATIVE

DEQ initiated its process by publishing notice in Montana newspapers that an application for the MATL project had been received and started the public scoping process. The notice ran in five newspapers for two weeks. In addition a press release alerted other media of the proposal and meetings. In June 2006 another notice of a scoping meeting ran in four area newspapers after MATL revised its proposed alignment north of Cut Bank.

On November 18, 2005, DOE published in the *Federal Register* (70 FR 69962) a Notice of Intent to Prepare an EA and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Involvement. That notice opened a 45-day scoping period during which the public was invited to participate in the identification of potential environmental impacts that may result from construction of the MATL transmission line project and reasonable alternatives. Scoping meetings were held in the project area as described in Section 1.5.1.

In March 2007, the DEQ and DOE published a draft document that was both the DEQ Draft EIS and the DOE EA. The document was distributed for public comment and three public hearings were conducted to receive comments on the document during a 55-day public comment period. Based on comments received on the March 2007 document relating to land use and potential effects on farming, DOE determined an EIS to be the appropriate NEPA compliance document. Accordingly, on June 7, 2007, DOE published in the *Federal Register* (72 FR 31569) a Notice of Intent to Prepare an EIS and to Conduct Scoping. On July 27, 2007, MATL submitted to the U.S. Bureau of Land Management (BLM) an Application for Transportation and Utility Systems and Facilities on Federal Land. On September 6, 2007, DOE invited BLM to participate as a cooperating agency in the preparation of the EIS. DOE requested BLM's involvement to address BLM's authority to approve MATL's request for a special use permit and the proposal's relationship to relevant BLM land use plans. On October 12, 2007, BLM informed DOE of its intent to be a cooperating agency in the preparation of this EIS.

Comments received on the March 2007 document indicated additional analysis was needed to describe the costs of farming around the proposed structures and to compare these costs to the additional costs associated with alternative locations for the line. In addition substantial changes to state tax law took place in Montana's April 2007 special legislative session [that](#) changed the analysis of socioeconomic impacts. These issues [were](#) addressed further in [a](#) document [published in February 2008](#), which [was](#) both a Federal Draft EIS and a State of Montana Supplemental Draft EIS [\(the Draft EIS\)](#). [The agencies distributed the document for public comment, initiating a 45-day public comment period. During that time, the agencies held three public hearings allowing the public to submit their comments and also accepted written comments from the public. The agencies reviewed all the comments they received and prepared this Final EIS. The EIS also incorporates changes to MATL's application for the proposed Project and other updated information and analysis.](#)

General DOE Requirements

The Department of Energy has the responsibility for implementing Executive Order (E.O.) 10485 (September 9, 1953), as amended by E.O. 12038 (February 7, 1978), which requires the issuance of a Presidential permit for the construction, operation, maintenance, and connection of electric transmission facilities at the United States international border. DOE may issue the permit if it determines that the project is in the public interest, and after obtaining favorable recommendations from the U.S. Departments of State and Defense. In determining if a proposed Project is consistent with the public interest, DOE considers:

1. Potential environmental impacts in accordance with the National Environmental Policy Act of 1969 (NEPA) and Council on Environmental Quality and DOE implementing regulations at 40 CFR 1500-1508 and 10 CFR 1021, respectively;
2. The proposed Project's impact on electric reliability, that is whether the proposed Project would adversely affect the operation of the U.S. electric power supply system under normal and contingency conditions; and
3. Any other factors that DOE may consider relevant to the public interest.

General NEPA/MEPA and MFSA Requirements

MEPA requires that decision makers consider the effects of their actions on the environment, and that state agencies inform the public of the decision making process and allow participation in the process. Similarly, NEPA requires that Federal decision makers be fully informed of the potential environmental consequences of their actions and document the reasons for their decisions. If DEQ and DOE determine that issuing a certificate or granting a Presidential permit would be in the public interest, the information contained in this document would provide a basis upon which those decisions are made. DEQ and DOE would consider this information in deciding which alternative(s) could be implemented and which mitigation measures, if any, would be appropriate for inclusion as a condition of the certificate or permit. The agencies will document their decisions.

MFSA requires a certificate of compliance for development of this electric transmission line. The purposes are to: (1) ensure the protection of the state's environmental resources; (2) ensure the consideration of socioeconomic impacts; (3) provide citizens with an opportunity to participate in facility siting decisions; and (4) establish a coordinated and efficient method for the processing of all authorizations required for regulated facilities (DEQ 2006). A summary of how the Project and alternatives would address each MFSA-required finding, including probable impacts, is provided in Section 3.18.

Under MFSA, the Montana Departments of Transportation (MDT), Natural Resources and Conservation (DNRC), Fish, Wildlife and Parks (FWP), and Revenue ([DOR](#)), and the [Montana](#) Public Service Commission ([MPSC](#)) are required to report to DEQ information related to the impact of the proposed site on each agency's area of expertise. The report may include opinions on the advisability of granting, denying, or modifying the certificate (75-20-216[6], MCA).

Organization of the [EIS](#)

This [EIS](#) is presented in 2 volumes: Volume 1 is the [main text of the](#) Environmental Impact Statement and [Appendices](#); Volume 2 contains the responses to public comments on the [Draft EIS](#). [Because of their length, the appendices are not printed as part of Volume 1, but are provided on the accompanying compact disk \(CD\).](#)

Volume [1](#), Chapter 1 includes a description of the project, purpose, benefit, and need for the project, relevant agency permitting actions, public participation, issues of concern, and other background information. Chapter 2 of this [EIS](#) contains the descriptions of MATL's proposed Project and the alternatives to the Project, along with alternatives considered but dismissed. Chapter 3 presents the affected environment and impacts analysis. [Chapter 3 also includes information pertaining to the findings that DEQ is required to make under MFSA \(Final findings will be made in its certificate decision\).](#) Cumulative impacts, unavoidable adverse impacts, and irreversible and irretrievable impacts are in Chapter 4. Consultation and coordination with other agencies and interested groups is in Chapter 5. The list of people who prepared this document is in Chapter 6. Chapter 7 presents a glossary and acronym list. References are in Chapter 8. [Chapter 9 contains a list of the persons to whom the EIS was distributed.](#)

[Fifteen](#) appendices (Appendix A through [O](#)) [that](#) were included in [earlier](#) documents [are included in this Final EIS, but provided only in electronic format on the accompanying CD. Three have been revised as follows:](#)

Appendix F – Revised Draft DEQ Environmental Specifications

Appendix M – [Interconnection Information and Agreement](#)

Appendix N – Farm Cost Review for MATL Project ([2007 and 2008 Costs](#))

[Appendices P and Q have been added:](#)

[Appendix P](#) – [Endangered Species Act Section 7, State Historic Preservation Officer, and Tribal Consultation](#)

[Appendix Q](#) – [Contractor's Disclosure Statement](#)

[Volume 2 contains comments on the Draft EIS, and agency responses to those comments.](#)

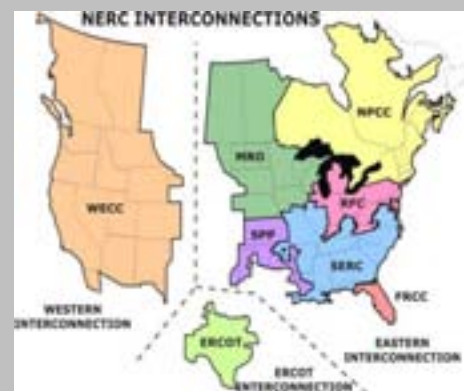
[The CD that accompanies this EIS includes the March 2007 document, the volume \(Volume 2\) of the February 2008 DEIS that provided responses to comments received on the March 2007 document, and Volumes 1 and 2 of this Final EIS, including all 17 appendices.](#)

1.1 Project Background

In North America, electricity moves from power generating facilities to customers using a transmission system. The North American Electric Reliability Corporation (NERC) is responsible for improving the reliability and security of the electric power system in North America. NERC works with eight Regional Reliability Councils to improve the reliability of the bulk power system. The members of the regional councils come from all segments of the electric industry: investor-owned utilities, Federal power agencies, rural electric cooperatives, state, municipal and provincial utilities, independent power producers, power marketers, and end-use customers (NERC 2006). These entities account for virtually all the electricity supplied and used in the U.S., Canada, and a portion of Baja California, Mexico (**Figure 1.1-2**). Montana is located primarily within the Western Grid (see text box) under the direction of the Western Electricity Coordinating Council (WECC), one of the eight regional councils.

By design, the Western Grid system is weakly tied to the eastern portion of the North American Grid. There is currently no direct high voltage power transmission connection between Alberta and Montana (**Figure 1.1-2**).

While the power system in North America is commonly referred to as “the grid,” there are actually three distinct power grids or “interconnections.” The Eastern Interconnection includes the eastern two-thirds of the continental United States and Canada from Saskatchewan east to the Maritime Provinces. The Western Interconnection includes the western third of the continental U.S. (excluding Alaska), the Canadian provinces of Alberta and British Columbia, and a portion of Baja California Norte, Mexico. The third interconnection comprises most of the state of Texas. The three interconnections are electrically independent from each other except for a few small direct current ties that link them. Within each interconnection, electricity is produced the instant it is used, and flows over virtually all transmission lines from generators to loads.



NERC Regions and Balancing Authorities

Map showing the six NERC Regions and their Balancing Authorities (BAs) as of January 12, 2006. The regions are color-coded and labeled:

- WECC** (Western Electricity Coordinating Council) - Orange
- MRO** (Midwest Reliability Organization) - Green
- NPCC** (North American Power Pool) - Yellow
- SPP** (Southwest Power Pool) - Purple
- ERCOT** (Electric Reliability Council of Texas) - Light Green
- SERC** (Southeastern Electric Reliability Council) - Blue
- FRCC** (Florida Reliability Coordinating Council) - Red
- RFC** (Reliability First Corporation) - Pink

Balancing Authorities (BAs) are marked with circles and labeled with three-letter codes. Dashed lines indicate Dynamically Controlled Generation.

Source: North American Electric Reliability Council
As of January 12, 2006

+

As of January 12, 2006

To ensure reliable electrical transmission service, NERC authorizes “balancing authorities” in critical areas throughout the system that are responsible for maintaining load-interchange-generation balance within a balancing authority area. The WECC region contains 44 transmission operators and 35 balancing authorities (**Figure 1.1-2**). NWE and DOE’s Western Area Power Administration (WAPA) are the two balancing authorities in Montana (NERC 2007). A description of the existing transmission system in Montana and Alberta, and how reliability could be affected by the Project is provided in Section 3.17.

1.2 Purpose, Benefit, and Need

This section describes the purpose and benefit of the proposed action as required under MEPA and MFSa (Section 1.2.1) and [the need for the proposed action as required under MFSa. This section also addresses the purpose and need for the Federal action as required under NEPA](#) (Section 1.2.4).

1.2.1 Purpose and Benefit to the State of Montana

The purpose for the proposed MATL transmission line is to connect the Montana electrical transmission grid with the Alberta electrical transmission grid (no direct connection currently exists), provide access to potential markets for new and existing power generation facilities in the vicinity of the proposed transmission line, and improve transmission access to markets seeking new energy resources. Expected benefits of the proposed Project are summarized below and examined in detail in Section 3.13.

Benefits to Electricity Generators and Consumers in Montana

The proposed transmission line could transport 300 MW of power north and 300 MW south on a firm basis (guaranteed). Customers who have signed agreements with MATL to ship power on a firm basis are currently wind farm developers in Montana and are listed in **Table 4.1-2**. Although the electricity generated by these wind farms may be shipped over the MATL transmission line and the majority of the revenue earned by MATL may be from wind farm operators, the MATL transmission line and the potential wind farms are not connected actions. Potential wind farms along the MATL line are considered to be reasonably foreseeable future actions and are discussed as cumulative impacts in Chapter 4.

Due to constraints on the current electrical grid system where MATL would tie in at Great Falls, the full capacity of 300 MW to the south may not be realized at all times. The added electrical transmission capacity from the MATL line could support a modest increase in new power generation in Montana. When the firm capacity is not being

fully used by the contracted firm power generators, the line would be available for short-term, non-firm transfers of power from other generation sources. If the proposed transmission line is approved, MATL will have already sold the firm capacity of the line to four potential wind farms before construction begins. The known information regarding the four wind energy generation companies that have contracted with MATL is provided in Chapter 4.

Additional expected benefits to Montana generators and consumers include: additional connection with markets that demand energy from sustainable sources, such as electricity generated from wind power; additional wholesale electricity purchasing options for Montana utilities, which could result in lower rates due to an increase in supplier competition; and increased opportunities for western grid system optimization during high Montana export and low Alberta-BC export scenarios.

Benefits to Existing Transmission Systems

A modified transmission system, including a tie line between Montana and Alberta, may also result in benefits to transmission system operators whose service areas include Montana and to utilities that provide transmission service within the state. A modified transmission system could provide more options for power routing within Montana, increase energy transactions between Montana and Alberta, and allow for easier balancing of energy surpluses and shortages within and between balancing authority areas. Because tie lines are able to connect with adjacent electric systems, different generation resources can combine to provide a level of reliability that one jurisdiction could not otherwise afford if that jurisdiction had to cover the same resources independently. The MATL line could also create another opportunity for Montana's largest privately owned transmission and distribution utility, NWE, to obtain regulating reserves for its transmission system control area.

1.2.2 Benefits as Stated by the Applicant

The MATL transmission line is a merchant line the primary purpose of which is to financially benefit the owner/operators. The MATL application for certification described the following benefits to MATL, the U.S., and Canada (MATL 2006b):

The Project would be the United States' first power transmission interconnection with Alberta and is expected to facilitate development of additional sources of generation (e.g., wind farms both in northern Montana, and southern Alberta), and improve transmission system reliability in Montana, Alberta, and on a regional basis in both the U.S. and Canada. In addition, the Project would promote increased trade in electrical energy across the international border, and provide a transmission route to balance energy surplus/shortage situations in an efficient and economic manner.

In addition, MATL asserts that system stability studies conducted under the direction of the WECC Peer Review Group indicate that the proposed Project would not adversely affect transmission system stability (Tonbridge Power, Inc. 2007). [MATL and NorthWestern Corporation executed a Transmission Line Interconnection Agreement on December 20, 2007, that became effective on January 31, 2008. The cover and signature pages of this agreement are included in Appendix M.](#)

1.2.3 Need for the Facility

The need for this line is the additional transfer capacity it would provide, if built. This line would directly connect Montana's and Alberta's regional operating transmission systems, and would allow power to flow directly between these two systems where there is no current connection.

Because Montana makes more electricity than it consumes, to be economically viable, any new generation resources in Montana will offer competitive pricing and have adequate transmission access to compete in out-of-state markets or replace an existing supplier choosing to take higher profits by selling out of state (DEQ 2004). Either way, additional transmission capacity is not needed to serve Montana customers, but it is essential for the viability of new generation enterprises (DEQ 2004).

The MATL transmission line could support a modest increase of new electricity generators, such as wind, in the study area by connecting them to regional grids and thus potentially to electricity markets. The MATL transmission line is proposed to be capable of shipping up to 300 MW north and 300 MW south. The amount of new generation that would be able to be shipped south into Montana by MATL is currently unknown due to potential transmission constraints south of Great Falls, which would be the southern terminus of the MATL transmission line. To the extent that southerly electrical flows on the MATL transmission line are constrained, this would reduce MATL's ability to meet the need for increased capacity. It also might result in more electricity flowing north from Montana into Alberta than from Alberta to Montana.

1.2.4 Purpose and Need for DOE [and BLM](#) Action

DOE will consider this EIS to determine whether to grant a Presidential permit to MATL for the construction, operation, maintenance, and connection of the proposed 230-kV transmission line that would cross the U.S.-Canada border. The purpose of DOE's action is to respond to MATL's request for a Presidential permit. BLM will use this EIS to determine whether granting an easement to MATL for the proposed transmission line would be compatible with its West HiLine Resource Management Plan.

1.3 Scope of this Document

The objective of this [EIS](#) is to evaluate the potential environmental impacts associated with the proposed actions of issuing a MFSA [Certificate of Compliance](#), a DOE Presidential permit, and a BLM easement that would result in the construction and operation of the proposed MATL 230-kV transmission line (the Project); [it evaluates the applicant's proposed route and](#) two [other](#) action alternatives. This document also provides information pertaining to findings necessary for transmission line certification in accordance with MFSA (Section 3.18). The document also considers a "No Action" alternative, the impacts of not certifying or permitting the proposed facility, or amending the land use management plan. The alternatives are described in Chapter 2 along with several [Local Routing Options](#). The description of the environment that would be affected by the proposed Project and alternatives and an analysis of impacts to human health and the environment are provided in Chapter 3. Resource areas that are discussed in detail in this document are: land use, geology and soils, engineering, hazardous materials, water, wetlands, vegetation, wildlife, fish, special status species, air quality, noise, transportation, human health and electromagnetic fields, socioeconomics, visuals, cultural resources, and the transmission grid.

This [EIS](#) analyzes only those project-related facilities constructed inside the [United States](#). Neither the [United States](#) nor agencies of the State of Montana have jurisdiction over the regulation or permitting of facilities in Canada.

1.3.1 Alternatives Considered For Detailed Analysis

A discussion of how alternatives were developed, alternatives considered but dismissed from detailed analysis, and complete descriptions of the four alternatives considered for detailed analysis is provided in Chapter 2. A summary of the four alternatives is presented below.

Alternative 1 – No Action

Under Alternative 1, the proposed Project would not be approved by DEQ, DOE, or BLM and, consequently, would not be constructed. Existing electrical transmission service in north-central Montana would be maintained and operated at its current level. In addition, plans to construct new generation facilities in the analysis area would need to consider other transmission alternatives or not be built.

Alternative 2 – Proposed Action

Alternative 2 is to construct and operate a merchant transmission line between Great Falls, Montana and Lethbridge, Alberta, as described in MATL's application to DEQ (MATL 2006b), application to DOE for a Presidential permit, and application to the BLM for an easement. The Alternative 2 proposed alignment is 129.9 miles long (within Montana) and extends from the 230-kV Great Falls Switchyard north of Great Falls to a proposed new substation near Cut Bank, and extends north to the Montana-Canada border at the western edge of the Red Creek Oil Field. Monopole structures would be used on 56 miles of the line where it would cross cropland and Conservation Reserve Program (CRP) land diagonally. H-frame structures would be used for the remainder of this alternative.

Alternative 3 – MATL B

Alternative 3 would be 121.6 miles long and would be similar to Alternative 2 in that the width of the right-of-way, types of access roads, implementation, conductors, markers, substations, construction, operations, maintenance, and potential environmental protection measures would be the same as those described for Alternative 2. The Alternative 3 alignment would be different from Alternative 2 in that it would generally parallel an existing 115-kV transmission line along the entire route from the Great Falls Switchyard to a substation near Cut Bank and use only H-frame structures. Alternative 3 was developed by MATL in response to a single preferred location MFSA siting criterion that recommends paralleling existing utility corridors (Circular MFSA-2, section 3.1). This alternative alignment was not intended to address potential land use issues or maintenance issues.

Alternative 4 – Agency-Developed

Alternative 4 was developed by DEQ within MATL's study area to address concerns raised by the public and interested agencies during the scoping period. Issues of concern that helped shape Alternative 4 are: potential adverse impacts to farmers from diagonal crossings of farm fields using H-frame structures, limitations on private property use due to crossings on private land, and disturbance of visual resources. The alignment under Alternative 4 would be 139.6 miles long and would be generally constructed along field boundaries and where diagonal crossings would not impact farming practices or other private land use. Public land (both Federal- and state-owned) would be used when its use would be as economically practicable as the use of nearby private land. Alternative 4 would also include additional environmental protection measures recommended by DEQ and DOE, but not required under Alternatives 2 and 3. The use of monopoles would be required where the line would cross cropland and CRP land. The width of the right-of-way, project implementation, conductors, markers, substations, types of access roads, construction, operations, and maintenance would be the same as Alternatives 2 and 3.

1.3.2 The Agencies' Preferred Alternative

The preferred alternative consists of portions of Alternatives 2 and 4 as shown on Figures 1.3-1, 1.3-2, and 1.3-3 and described in detail in Section 2.7. It would begin at the Great Falls Switchyard and follow Alternative 4 for 27.3 miles. For that point to Milepost 103.1 it would primarily follow Alternative 2, but would include the Diamond Valley South, Teton River, Southeast of Conrad, Northwest of Conrad, Belgian Hill, Bullhead Coulee South, Bullhead Coulee North, and South of Cut Bank Local Routing Options. North of Milepost 103.1 the preferred alternative would coincide with Alternatives 2 and 4 to join with Canada's approved route at the border crossing. The preferred alternative would use monopoles wherever cropland and CRP lands would be crossed.

The DEQ selected the preferred alternative because it represents the best balance of state location criteria, including but not limited to impacts to farmland, cost, avoidance of houses, public acceptance, paralleling existing corridors, and use of public lands. DOE has also selected the described alternative as its preferred alternative.

1.3.3 Other Analyses Used In This Document

Portions of the EIS describing some of the potential impacts resulting from potential development of wind generation projects were summarized and updated from the *Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States* (BLM 2005). This document assessed the environmental, social, and economic impacts associated with wind energy development on BLM-administered land. This analysis was used to evaluate cumulative impacts on the environment that would result from the incremental impact of an action alternative when added to other reasonably foreseeable future actions such as increased wind energy development projects.

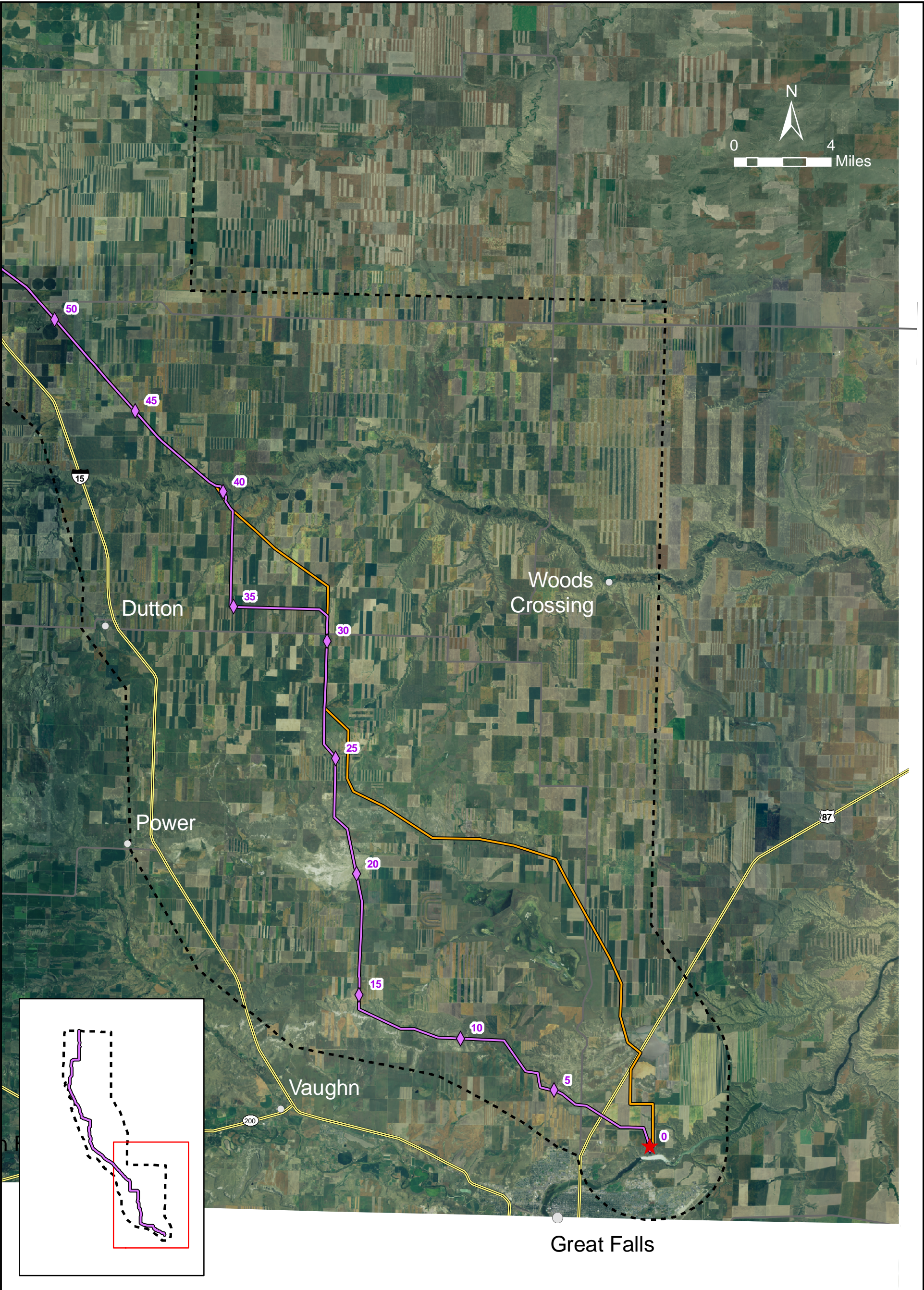


FIGURE 1.3-1
AGENCIES' PREFERRED ALIGNMENT
SOUTH

- LEGEND**
- APPLICANT'S PROPOSED ALIGNMENT ALT 2
 - AGENCIES' PREFERRED ALIGNMENT
 - AGENCIES' MILE MARKERS
 - CITIES AND TOWNS
 - ALIGNMENT END AND EXIT POINTS
 - STUDY AREA BOUNDARY
 - MAJOR HIGHWAYS
 - SECONDARY ROADS
- NOTE:
ALT = ALTERNATIVE

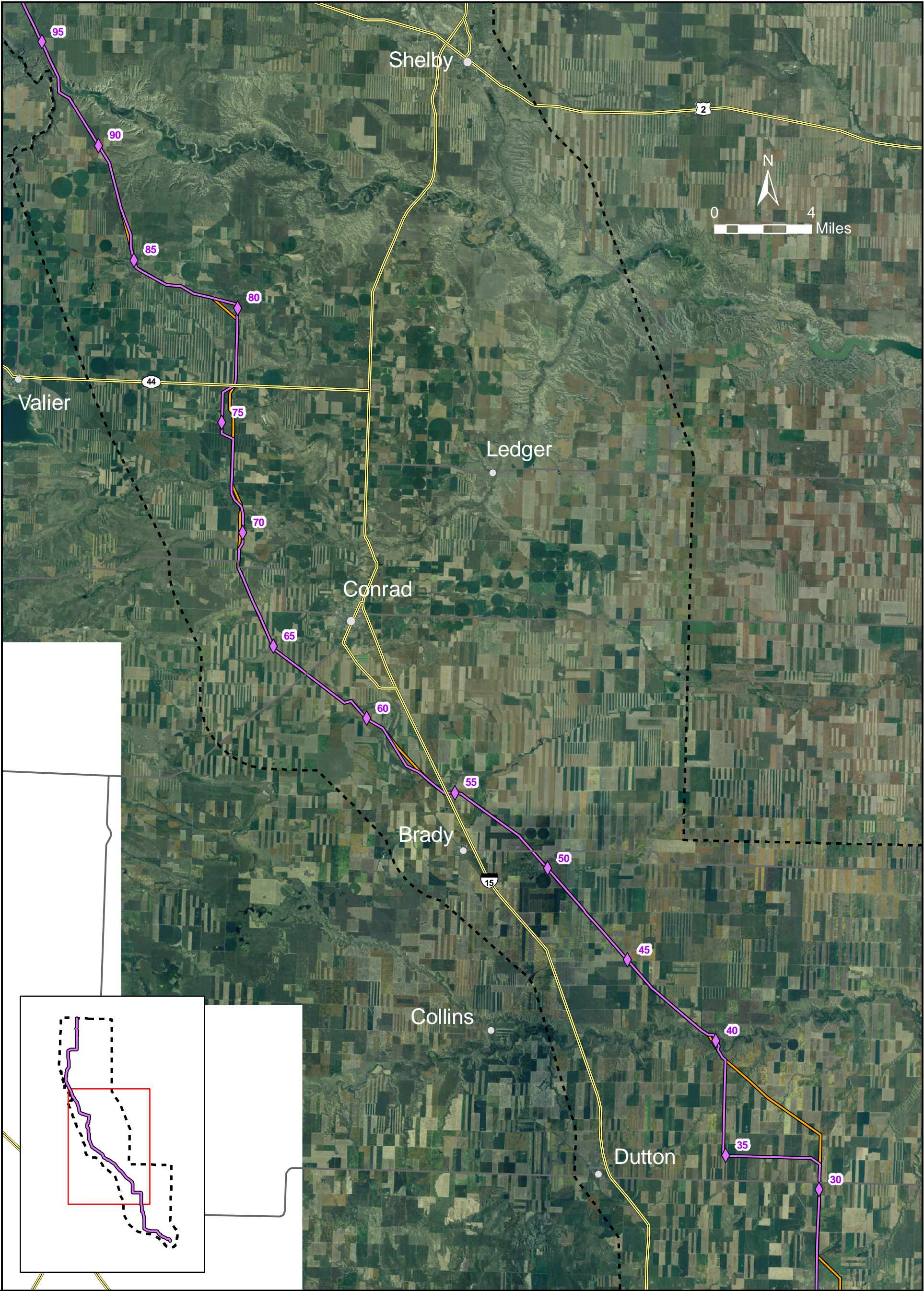


FIGURE 1.3-2
AGENCIES' PREFERRED ALIGNMENT
MIDDLE

LEGEND

APPLICANT'S PROPOSED ALIGNMENT
ALT 2

AGENCIES' PREFERRED ALIGNMENT

AGENCIES' MILE MARKERS

CITIES AND TOWNS

ALIGNMENT END AND EXIT POINTS

STUDY AREA BOUNDARY

MAJOR HIGHWAYS

SECONDARY ROADS

NOTE:
ALT = ALTERNATIVE

GIS map by Ed Madej -TTEMI-HE Fig1_3-2_MATL_MTEDQ_PREFERRED_Alignment_Middle_091108.mxd

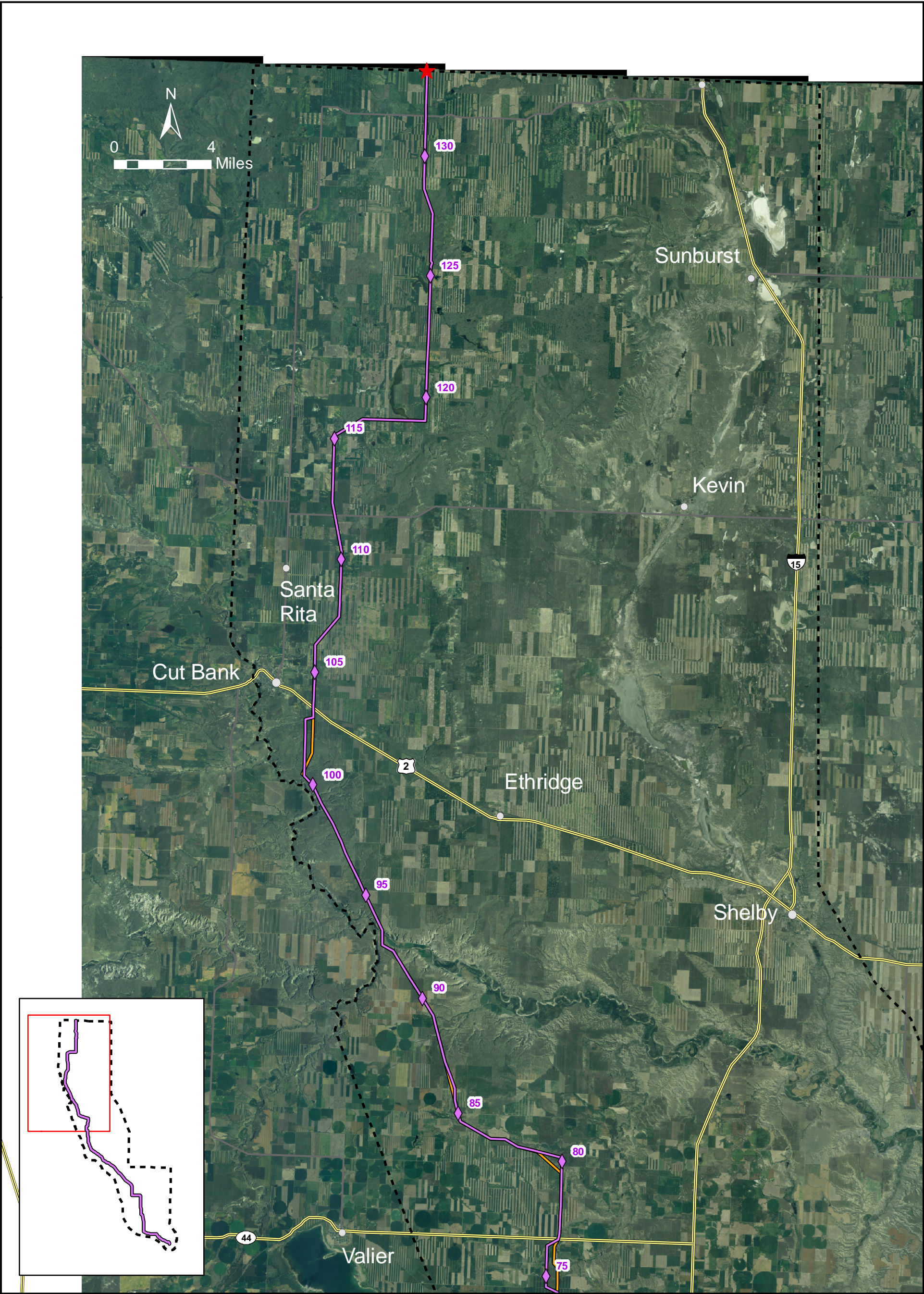


FIGURE 1.3-3
AGENCIES' PREFERRED ALIGNMENT
NORTH

LEGEND

APPLICANT'S PROPOSED ALIGNMENT
ALT 2

AGENCIES' PREFERRED ALIGNMENT

AGENCIES' MILE MARKERS

CITIES AND TOWNS

ALIGNMENT END AND EXIT POINTS

STUDY AREA BOUNDARY

MAJOR HIGHWAYS

SECONDARY ROADS

NOTE:
ALT = ALTERNATIVE

GIS map by Ed Madej -TTEMI-HE Fig1_3-3_MATL_PREFERRED_Alignment_North_091108.mxd

1.4 Agency Permitting Actions and Authorities

Together, DEQ, DOE, and BLM are responsible for the preparation of this EIS. DEQ administers MFSA, MEPA, the Montana Hazardous Waste Act, the Montana Water Quality Act, and the Clean Air Act of Montana. After a certificate is issued, MFSA (75-20-401[1], MCA) would preempt all other state and local laws except those pertaining to air quality, water quality, worker health and safety, noxious weed control, and instances where the state has a property right such as on state-owned land.

The location of the proposed MATL transmission line will conform to applicable state and local laws and regulations, except where the DEQ may refuse to apply any local law or regulation if it finds that the law or regulation is unreasonably restrictive in view of existing technology, of factors of cost or economics, or of the needs of consumers, whether located inside or outside the directly affected government subdivisions.

In addition to DEQ, DOE, and BLM, other local, state, and Federal agencies have jurisdiction over certain aspects of MATL's proposed Project. **Table 1.4-1** provides a comprehensive listing of agencies and their respective permit/authorizing responsibilities with respect to the proposed Project.

The initial step in the Montana regulatory process is filing of [an application for a certificate under MFSA pursuant to](#) Title 75, Chapter 20, MCA. MATL submitted its MFSA application in December 2005. For DOE, the initial step was MATL's submission of its application for a Presidential permit on October 7, 2005 (70 FR 65891, November 1, 2005). For BLM, MATL must submit an application for Transportation and Utility Systems and Facilities on Federal Land prior to beginning construction of the transmission line.

Electricity Export Authorization

Exports of electricity from the United States to a foreign country are regulated by DOE pursuant to sections 301(b) and 402(f) of the Department of Energy Organization Act (42 U.S.C. 7151(b), 7172(f)) and require authorization under section 202(e) of the Federal Power Act (FPA) (16 U.S.C.824a(e)). However, in its application to DOE for a Presidential permit, MATL indicated that it intends to operate the proposed merchant transmission line as an "open access" transmission facility, as that term is defined by the U.S. Federal Energy Regulatory Commission, and that MATL would not export electric energy to Canada on its own account. Therefore, MATL does not intend to seek, nor does it require an electricity export authorization. However, any other entity exporting electricity to Canada using the MATL facilities, if authorized, would require an electricity export authorization issued by DOE.

TABLE 1.4-1 PERMITS AND OTHER REQUIREMENTS FOR THE PROJECT			
Permit ^a	Agency	Description	Authority
STATE			
Certificate of Compliance	Montana Department of Environmental Quality	Reviews project application, conducts reviews of project impacts, approves and coordinates other permit activities, and monitors project to determine compliance with terms of certificate.	Montana Major Facility Siting Act
Section 401 Certification	Montana Department of Environmental Quality	Provides review of potential adverse water quality impacts from discharges associated with dredged or fill materials in wetlands and other Waters of the U.S.	Montana Water Quality Act
318 Authorization	Montana Department of Environmental Quality	Provides for a temporary narrative water quality standard for turbidity due to construction.	Montana Water Quality Act
Land Use License (DS-432)	Montana Department of Natural Resources and Conservation	Licensing structures and improvements on state lands and across navigable water bodies.	Title 77, MCA
Pre-construction Authorization	Montana Department of Natural Resources and Conservation	Authorizes construction prior to easement grant by the Board of Land Commissioners	85-2-402 and 85-2-407, MCA
Utility Crossing Consultation and Occupancy Permit	Montana Department of Transportation	Jurisdictional authority for issuing encroachment and occupancy permits; issuing approach permits; and review and approval of modification to Federal-aid eligible highways.	60-6-111, MCA; Title 75, Chap. 20, Sec. 103 and 401
FEDERAL			
Presidential Permit	U.S. Department of Energy	Issuance of a permit must be found to be consistent with the public interest and DOE must obtain concurrence of the Secretary of State and Secretary of Defense before permit can be issued.	Executive Orders 10485 and 12038
Section 404	U.S. Army Corps of Engineers	Controls discharge of dredged or fill materials in wetlands and other Waters of the U.S.	Section 404 of the Clean Water Act (33 CFR 323.1, 330)
Notice of Proposed Construction/Alteration	Federal Aviation Administration	Structure location, height, lighting, and documentation relative to air traffic corridors.	14 CFR Part 77, Objects Affecting Navigable Airspace

TABLE 1.4-1 PERMITS AND OTHER REQUIREMENTS FOR THE PROJECT			
Permit^a	Agency	Description	Authority
Safety Plan	Occupational Safety & Health Administration	Provides guidance to on-site construction worker safety along with emergency contacts, hospital routes, etc.	29 CFR 1910
Tariff Review and Approval	Federal Energy Regulatory Commission	Approval of rates for transmission in interstate commerce for jurisdictional utilities, power marketers, power pools, power exchanges and independent system operators.	Title 18 CFR
Review Authority	U.S. Department of Defense/U.S. Air Force	Review of construction plans for power pole placement for potential disturbance of buried cables for Minuteman missile silos.	Consultation and concurrence
Consultation	U.S. Department of Defense Homeland Security	Presently required by U.S. security policy.	Consultation and concurrence
Utility Permit for Interstate Crossing	U.S. Federal Highways Administration	Review and approval of Montana Department of Transportation permit for transmission lines in the Interstate Highway System right-of-way.	23 CFR Part 645
Section 7 Consultation	U.S. Fish and Wildlife Service	Identifies any species and its habitat listed as endangered or threatened that may be impacted by the project.	Federal Endangered Species Act of 1973
A Biological Opinion or Concurrence with the Biological Assessment	U.S. Fish and Wildlife Service	USFWS must concur with the Biological Assessment or prepare a Biological Opinion.	Federal Endangered Species Act of 1973
Section 106 Consultation	Advisory Council on Historic Preservation and Montana State Historic Preservation Office	Consultation between project applicants and Federal agencies regarding impacts on cultural resources that are either listed or eligible for listing on the NRHP.	Section 110 and 106 of the National Historic Preservation Act
Rights of Way on Federal Land	U.S. Bureau of Land Management	Easement on Federal land crossed by the project.	Federal Land Policy Management Act Subchapter V
Compatibility Review	U.S. Department of Agriculture, Farm Service Agency	Facility siting on CRP contracted land requires a compatibility review to determine a facility's potential impact to the CRP status of the affected property.	Food Security Act of 1985

TABLE 1.4-1 PERMITS AND OTHER REQUIREMENTS FOR THE PROJECT			
Permit ^a	Agency	Description	Authority
LOCAL/COUNTY/OTHER			
Noxious Weed Management Plan	County Weed Control Districts	Provides containment, suppression, and eradication of noxious weeds.	Title 7, MCA
Easement Grants and Road Crossing Permits	Boards of County Commissioners	Consider issuance of right-of-way easement grants and road-crossing permits for county property and roadways.	County Commissioners
Line Rating	Western Electricity Coordinating Council	Three phases of line rating approval.	National Electricity Coordinating Council Energy Policy Act of 2005

Notes:

^a Refers to permit, notice, review authority, certificate, license, consultation or law.

CFR Code of Federal Regulations

MCA Montana Code Annotated

USC United States Code

Eminent Domain

Eminent domain is the process by which the state can acquire private property for public use. The state is limited in that “just compensation to the full extent of the loss” will be paid to the property owner when exercising eminent domain (Montana Legislative Services 2005). Different property types and land uses have been identified by the legislature as appropriate public uses of eminent domain. [Electrical energy lines are included as a public use under 70-30-10,\(37\), MCA.](#) Before acquiring property through the use of eminent domain, the state will prove that public interest requires taking the property based on several criteria and then proceed through the legal process (Evans 2001). It is through eminent domain that states have the power to provide transportation corridors and other infrastructure needs for their citizens.

Any Presidential permit that DOE may issue [would](#) not convey any rights of eminent domain.

1.5 Public Participation and Issues of Concern

The scoping process is used to identify all issues relevant to the Project as proposed by the applicant and to develop alternatives to the proposed Project. Members of the public, the agencies, and the interdisciplinary EIS team all helped to define the issues for the scope of analysis. Information related to consultation and coordination among public and government entities can be found in Chapter 5.

1.5.1 Opportunities for Public and Agency Input

DOE issued a “Notice of Intent to Prepare an Environmental Assessment and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Involvement; Montana Alberta Tie, Ltd.” in the *Federal Register* on November 18, 2005 (70 FR 69962). In addition, DOE mailed a copy of the notice, using Montana land ownership records, to each owner of land on the MATL-proposed corridor.

DEQ and DOE hosted public meetings in December 2005. In addition, DEQ hosted a public meeting in June 2006 because MATL changed its proposed alignment north of Cut Bank. During the meetings, the public was asked to identify issues and concerns to be addressed during the review. During each meeting, MATL and DEQ representatives presented briefings. Maps and other information were available for review, and representatives from each agency were available to discuss the project, answer questions, and receive public comments.

Meeting dates and locations are listed below:

- Conrad on Monday, December 5, 2005, at Norley Hall,
- Great Falls on Tuesday, December 6, 2005, at the Great Falls Civic Center,
- Cut Bank on Wednesday, December 7, 2005, at the Glacier County Voting Center, and
- Cut Bank on Monday, June 26, 2006, at the Cut Bank Civic Center.

Additionally, throughout the scoping process, stakeholders expressed their concerns via letters, phone calls, and emails.

A Draft EIS/EA was released for public review in March 2007. Three public hearings were held to receive public comments:

- Conrad on Tuesday, March 27, 2007, at Norley Hall,
- Cut Bank on Wednesday, March 28, 2007, at the Glacier County Voting Center, and
- Great Falls on Thursday, March 29, 2007, at the Great Falls Civic Center.

On June 7, 2007, DOE published in the *Federal Register* (72 FR 31569) a Notice of Intent to Prepare an EIS and to Conduct Scoping and invited additional comments for a 30-day period.

Following publication [and notice of availability](#) of [the Draft EIS in the Federal Register on February 15, 2008 \(73 FR 8869\)](#), the agencies [held](#) a 45-day comment period [that ended on March 31, 2008](#). During the [comment period](#), the agencies hosted [three](#) public hearings allowing the public to submit [oral and written](#) comments. [The agencies held public hearings in:](#)

- [Great Falls on Tuesday, March 11, 2008](#)
- [Cut Bank on Wednesday, March 12, 2008](#)
- [Conrad on Thursday, March 13, 2008.](#)

[The agencies also accepted written comments from the public throughout the comment period.](#)

Other agencies having interest or responsibility in the project approval process include: FWP, Montana State Historic Preservation Office (SHPO), DNRC, MDT, DOR, MPSC, U.S. Department of Agriculture (USDA) Farm Service Agency, BLM, and U.S. Fish and Wildlife Service (FWS).

1.5.2 Issues of Concern

Based on comments received from participating agencies and the public before and after the issuance of the March 2007 document, ten issues and concerns were identified and are briefly described below.

(1) Impacts on farming, ranching, and other land uses:

Concerns were expressed regarding potential difficulties and hindrances of farming around the transmission line structures, potential for interference with Differential Global Positioning System (DGPS)-guided farm equipment, potential for noxious weed growth, interference with existing and future pivot or mechanical irrigation systems, and additional fencing needs. One commenter noted that when the original NWE 115-kV Great Falls to Cut Bank line was

constructed in the mid-1960s, farmers on the west side of the Golden Triangle expressed concern over the H-frame structures, especially the difficulty of farming around them. With cultivation toolbars and sprayers today ranging up to 120 feet in length, an additional diagonal transmission line presents obstacles to farmers. Requests were made for evaluation of a monopole line that follows (where possible) existing roads, property or section lines, or field boundaries. Realignments of the proposed line could be made at turning points located on land historically used for grazing or placed in CRP. Some stakeholders commented that the proposed line should connect to the WAPA 230-kV line at Shelby, negating the need for a new line that would cross diagonally through cropland all the way to Great Falls.

- (2) Impacts on protected, threatened, endangered, and sensitive animal and plant species and their critical habitats:

Concerns were expressed about increased perch opportunities for birds of prey and resulting effects on sharp-tailed grouse populations and special status wildlife. There was concern over disturbance of rare plant species that may occur within the project area. Concerns were also expressed regarding interference with migratory and feeding flight paths of waterfowl, bird strike, and potential impacts on critical wildlife habitats.

- (3) Impacts on floodplains and wetlands:

Concerns were expressed about the size and degree of impacts on known and delineated floodplains, wetlands, waters of the U.S., and other special aquatic sites.

- (4) Avian mortality:

Concerns were expressed regarding bird mortality and suggestions were made for the use of bird strike mitigation practices currently implemented at the FWS Benton Lake National Wildlife Refuge and other applicable sites in the northern Great Plains.

- (5) Impacts on cultural and historic resources:

Concerns were expressed regarding potential disturbance of Native American settlements and religious sites in the alignments.

- (6) Impacts on human health and safety:

Concerns were expressed regarding specific voltage and current specifications, minimum ground clearance of the line, corona effects (including audible noise and radio and television interference), and other electromagnetic field effects from the operation of the 230-kV transmission line on human health and safety.

(7) Impacts on air, soil, and water:

Concerns were expressed regarding highly erodible soils, such as soil erosion and resultant sedimentation to surface water; mass movement and unstable geologic materials and soils; reclamation constraints; and potential increased soil erosion and impacts on existing air quality.

(8) Visual impacts:

Concerns were expressed regarding visual impacts to homes, historic homesteads, and tribal landscapes.

(9) Socioeconomic impacts:

Concerns were expressed regarding potential impacts to taxes and disturbance of residential property in Cascade, Teton, Chouteau, Pondera, Toole, and Glacier counties from the construction and operation of the line. Farmers expressed concerns regarding socioeconomic impacts associated with the costs of farming around transmission structures.

(10) Impact from development of wind generation projects:

Concerns were expressed regarding the potential wind energy and other electrical generation development, or limitations of that development that may be associated with the new Montana Alberta Tie 230-kV Transmission Line as “reasonable and foreseeable” development.

During the 45-day comment period following publication of the Draft EIS in February 2008, 352 individuals and organizations submitted comments in it, either orally at public hearings or in writing. Based on comments received, the agencies identified the following topics as common themes or major issues and concerns:

- Avian and Wildlife Issues, including the quality of field surveys for wildlife, potential impacts on bird and wildlife habitat, potential impacts of birds from collisions with the transmission line, effects on flyways, and impacts of potential wind farms;
- Economic Issues, including the distribution of benefits and costs of the line and the line’s effect on the cost of electric power;
- Farming Issues, including the issues farmers would face in having to farm around structures and how they would be compensated for their costs and inconvenience;
- Legal and Regulatory Issues related to NEPA, MEPA, Montana’s MFSA, eminent domain, and other State and Federal requirements;

- Line Capacity Issues, including possible future increases in capacity and the ability of power to be shipped past the termination points of the MATL line;
- Line Issues, including its location, types of support structures, easement width, and the need for substations;
- Safety Issues related to clearance under the proposed transmission line and the safety of farming activities under and around the line;
- Socioeconomic Issues, including the expected impacts of the proposed Project and potential wind farms on local school enrollment, wages, and property tax revenues;
- Soils Issues, including concerns about potential compaction and erosion due to transmission line construction;
- Tax Issues. Including questions about the taxation status of the proposed transmission line and affected farmland;
- Vegetation, Wetland and Weed Issues, including the potential for disturbance of wetlands and riparian areas, the potential for introduction of weeds, and the impacts of weed control;
- Visual Issues, including the effects of the transmission line and potential wind farms on views in and near Glacier National Park and the Rocky Mountain front;
- Wind Farm Issues, including potential impacts of bird and bat collisions, the effects of wind farms on views, and the potential for mitigation of wind farm impacts.

These issues are discussed in the Consolidated Responses section of Volume 2.